

Rochester, 0.07; and Oswego, 0.20 below. The greatest monthly rainfall was 14.07, at White Plains; and the least was 1.68, at Erie, Pa. Average number of days on which rain fell, 13.

Wind.—Prevailing direction, west.—*Prof. E. A. Fuertes, Ithaca, director; I. W. Brewer, Private, Signal Corps, assistant.*

OHIO.

SUMMARY.

Temperature.—The mean temperature of the northern section was 71.5; of the middle section, 72.5; of the southern section, 74.1, and of the state, 72.7. These means are 0.4, 0.7, 0.7, and 0.6 below the average for the sections and state for July; maximum, 98, at Wapakoneta, 9th; minimum, 46.5, at Wauseon, 25th. This is the highest minimum on record for the month of July since the opening of the bureau. The mean daily range of temperature was 20.3. The greatest daily range was 40, at Wapakoneta, 9th, and the smallest, 5, at Hanging Rock, 24th.

Precipitation.—Precipitation was general and heavy in all sections on the 2d, 3d, 18th, 14th, 15th, 18th, 19th, 28th, and 29th; in the northern section on the 1st and 10th, and in the southern section on the 11th, 24th, and 26th. Local rains occurred in all sections on the 4th, 22d, and 31st; in the northern section on the 30th, and in the middle and southern sections on the 1st, 10th, and 20th. The following unusually heavy rainfalls were reported: 1.15 in one-half hour, at Dayton, 14th; 1.14 in one and one-half hour, at Greenville, 14th; 2.00 in forty-five minutes, at Pomeroy, 80th; 1.87 in one and one-half hour, 18th, and 3.50 in two hours, 18th, at Canton, and 5.50 in three and one-half hours, 18th, at Logan. A severe local storm occurred at Princeton, Butler Co., on the evening of the 18th. The mean rainfall in the northern section was 3.34, which is 0.02 below the average; 4.24 in the middle section, and 5.18 in the southern section. These means are 0.58 and 1.58 above the averages for these sections for July. The mean for the state, 4.25, is 0.68 above the average. The deficiency in rainfall to August 1st amounts to 1.14 in the northern section; 4.29 in the middle section, and 4.97 in the southern section. The average deficiency for the state is 3.46.

Wind.—Prevailing direction, southwest.—*Prof. B. F. Thomas, Columbus, director; Lieut. Charles E. Kilbourne, secretary; C. M. Strong, Corporal, Signal Corps, assistant.*

PENNSYLVANIA.

SUMMARY.

Temperature.—The mean temperature was 71.2, which is about 1.0 below the normal, and 2.0 above the corresponding month of last year. The greatest departures were in the eastern border counties. The mean of the maximum temperatures was 81.3, and the mean of the minimum 61.8. The highest temperatures reported were Charlesville, 96; Hollidaysburgh and Greenville, 96; Pittsburgh, Coatsville, Grampian Hills, Bethlehem, New Bloomfield, and Philadelphia, 94. These occurred on the 9th and 10th. The lowest temperatures were Coudersport, 39; New Bloomfield, 40; Wellsborough, Columbus, and Dyberry, 42.

Precipitation.—The rainfall averaged 6.80 for the state, which is an excess of from 2.00 to 3.00. The month was very humid and tropical in character. Rains were frequent, and varied from light to torrential over areas little distant from each other. In many places heavy downpours occurred, which were disastrous, and entirely local in character. On the 30th and 31st very heavy rains occurred over the eastern part of the state, which caused heavy floods. The Schuylkill was reported the highest since the flood of 1869. Its banks were overflowed, and it is estimated that at one time ten feet of water were over Fairmount dam. The largest totals for the month were: Lansdale, 15.02; Ottsville, 13.19; Coatsville, 12.93; Frederick, 12.69; Pottstown, 12.50; West Chester, 12.49; Smith's Corner, 12.30; Point Pleasant, 12.30. The smallest were Greenville, 1.04; Erie, 1.68, and Columbus, 2.00. The excess of rainfall extended into New Jersey, Eastern New York, and Connecticut; also, Delaware and Maryland.

Wind.—Prevailing direction, west.—*Under direction of the Franklin Institute, Philadelphia; T. F. Townsend, Sergeant, Signal Corps, assistant.*

SOUTH CAROLINA.

SUMMARY.

Temperature.—The mean temperature for the month, 79.5, is 0.6 above the normal for the last three years; highest monthly mean, 82.6, at Jacksonborough; lowest monthly mean, 75.8, at Camden; maximum, 102, at Greenwood, 11th; minimum, 51, at Cedar Springs, 6th; range for state, 51. In most instances the maximum temperature occurred on the 11th, and the minimum on the 8th.

Precipitation.—The average rainfall for the state, 7.18, is 1.08 above the normal of the last three years; greatest monthly, 10.8, at Cheraw; least monthly, 2.70, at Timmonsville; greatest daily, 3.38, at Columbia, 30th. Average number of rainy days, 13.2.

Wind.—Prevailing direction, southwest.—*Hon. A. P. Butler, Columbia, director; H. C. Seymour, Private, Signal Corps, assistant.*

TENNESSEE.

SUMMARY.

Temperature.—The mean temperature, 76.8, is very nearly the normal for the past seven years; highest local monthly mean, 81.7, at Woodstock; lowest local monthly mean, 70.3, at Fostoria; maximum, 97, on the 22d, at Watkins, and on the 24th at Hohenwald; this was the lowest July maximum recorded during the past seven years, except that of 1876, which was the same;

the highest being 102, last year; minimum, 56, at Hohenwald, 81st; this, together with the July minimums of 1883 and 1887, is the highest during the period named, and was 10 above the average for that period. The highest temperature was recorded generally on the 10th, 11th, and 24th in the eastern division, and on the 10th, 18th, 23d, and 24th in the other two divisions. The lowest temperature was generally recorded on the 5th. The daily ranges of temperature were less than the normal.

Precipitation.—The average precipitation for the state, 5.33, is 1.29 above the July mean of the past seven years, and is the greatest July average during that period, except in 1884, when it was 5.55. Of this amount the eastern division received an average of a little more than 5.00, the middle division about 6.00, and the western division nearly 4.50. The rains fell in various parts of the state on twenty-eight days, only three days, the 5th, 6th, and 8th, being reported without measurable rain. There were about sixteen days of general rains. The days of the greatest rainfall were the 11th to 14th, 25th, 26th, and 28th. The rains were generally well distributed, although some very heavy local falls were reported. The greatest local daily rainfall occurred at Lawrenceburg, where 7.58 fell from 9 a. m., 12th, to 1 p. m., 18th, twenty-eight hours. The greatest local monthly rainfall was 9.04, at Fostoria, and 9.02, at Ashwood. This amount has been exceeded only once during the past seven years, in July, 1884, when 10.62 fell at Manchester. The least local monthly rainfall was 1.66, at Watkins. Most of the rains during the month were accompanied by electrical disturbances, which in some instances were quite severe, and some of them with high winds, notably on the 14th, 15th, 20th, 24th, and 28th. The storm on the last named date was the most severe and the most widespread during the month, and did immense damage to the growing crops, fencing, and timber, and in some localities, where it assumed almost the character of a tornado, houses were blown down or unroofed.

Wind.—Prevailing direction, southwest.—*J. D. Plunket, M. D., Nashville, director; H. C. Bate, Signal Corps, assistant.*

TEXAS.

SUMMARY.

Temperature.—The mean temperature for the month was from 2 to 3 above the normal over that portion of the state north of the thirtieth parallel and east of the ninety-eighth meridian (west from Greenwich), over the eastern portion of the Panhandle and the extreme western part of the state. Over the other portions of the state, except at Galveston and Brownsville, where the normal prevailed, the temperature ranged from 2 to 6 below the normal. The greatest deficiency occurred at Silver Falls, where the mean temperature for the month was 6 below the normal, and the greatest excess at Dallas, where the mean for the month was 3 above the normal. The mean temperature for July over the state was 80. The highest temperature reported was 108, from Fort Elliott on the 27th, and the lowest, 50, from Hartley on the 28d.

Precipitation.—The rainfall for July was very unevenly distributed, and was from 1.00 to 8.00 below the 18 year normals for the month, except over Dallas, Tarrant, and Johnson counties, where there was an excess ranging from 4.00 to 6.00. The rainfall along the coast was less than 1.00, except between Columbia and Port Lavaca, where from 1.00 to 4.00 fell.—*D. D. Bryan, Galveston, director; I. M. Cline, Sergeant, Signal Corps, assistant.*

Meteorological record of Army post surgeons, voluntary, and other co-operating observers, July, 1889.

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n | Stations. | Temperature. (Fahrenheit.) | | | Precip'n |
|------------------|-------------------------------|-------|-------|----------|---------------------------------|-------------------------------|-------|-------|----------|
| | Max. | Min. | Mean | | | Max. | Min. | Mean | |
| Alabama. | ° | ° | ° | Ins. | Arizona—Cont'd. | ° | ° | ° | Ins. |
| Bermuda †. | 94 | 79* | 76.9 | 4.07 | Benson* | 102 | 75 | 87.5 | 2.16 |
| Butler†. | 93 | 68 | 80.9 | 6.78 | Casa Grande* | 116 | 78 | 93.0 | 0.00? |
| Citronelle†. | 99 | 68 | 82.1 | 8.34 | Cedar Springs | ..... | ..... | ..... | 2.60 |
| Columbiana†. | 96 | 65 | 78.0 | 5.03 | Curtis* | ..... | 69 | 77.0 | 2.53 |
| Decatur (1)†. | ..... | ..... | ..... | 12.63 | Fairbank | ..... | ..... | ..... | 5.19 |
| Decatur (2)†. | 98 | 64 | 80.0 | 10.63 | Flagstaff | 102 | 40 | 68.6 | 5.00 |
| Elkmont†. | 94 | 66 | 77.8 | 8.51 | Florence | 111 | 66 | 89.8 | ..... |
| Eufaula†. | 96 | 68 | 80.0 | 6.24 | Fort Apache | 102 | 55 | 75.2 | 2.68 |
| Evergreen†. | 99 | 68 | 82.0 | 4.00 | Fort Bowie | 101 | 62 | 79.1 | 2.48 |
| Fayette C. H.†. | 91 | 63 | 78.0 | 8.10 | Fort Huachuca | 96 | 55 | 76.0 | 3.66 |
| Fort Deposit†. | 98 | 69 | 81.8 | 7.22 | Fort Lowell | 111 | 63 | 86.6 | 3.36 |
| Greensburg†. | 93 | 72 | 81.7 | 4.52 | Fort McDowell | 117 | 67 | 92.0 | 0.64 |
| Guntersville†. | 89 | 68 | 78.0 | 2.69 | Fort Mojave | 120 | 72 | 94.9 | T. |
| Livingston (1)†. | 94 | 68 | 79.5 | 6.84 | Fort Verde | 110 | 57 | 82.6 | 3.40 |
| Livingston (2)†. | 94 | 66 | 79.4 | 6.27 | Gila Bend* | 112 | 84 | 95.1 | 0.36 |
| Luverne†. | 98 | 70 | 82.7 | 5.19 | Globe | 102 | ..... | ..... | 1.36 |
| Marion†. | 94 | 62 | 77.4 | 7.84 | Holbrook* | 100 | 58 | 77.3 | 2.06 |
| Moorest. | 92* | 62 | 79.4 | 8.66 | Lochiel g. | 100 | 68 | 84.0 | 3.77 |
| Mount Willing†. | 94 | 70 | 79.5 | 8.45 | Maricopa* | 115 | 80 | 93.7 | 0.55 |
| Mt. Vernon Bks. | 100 | 65 | 81.0 | 7.91 | Pantano * | 111 | 70 | 86.6 | 3.22 |
| New Market†. | 88 | 59 | 75.7 | 8.54 | San Carlos | 111 | 64 | 85.8 | 1.67 |
| Opelika†. | 100 | 66 | 81.0 | 4.63 | San Simon* | 110 | 70 | 81.8 | ..... |
| Pine Apple†. | 100 | 66 | 81.4 | 0.19? | Signal | 114 | 68 | 93.0 | T. |
| Selma (2)†. | 98 | 67 | 82.6 | 4.80 | Strawberry | ..... | ..... | ..... | 2.10 |
| Talladega*. | 100 | 67 | 82.5 | 1.65 | Tevisiton | ..... | ..... | ..... | 1.80 |
| Tuscaloosa. | 91 | 66 | 80.6 | 7.08 | Tip Top | ..... | ..... | ..... | 2.50 |
| Tuscumbia (1). | 92 | 68 | 77.6 | 8.13 | Tombstone | 99 | 63 | 78.6 | 3.59 |
| Tuscumbia (2)†. | 94 | 58 | 78.8 | 6.17 | Tucson (1)*. | 105 | 66 | 85.6 | 5.66 |
| Union Springs. | 98 | 70 | 80.8 | 2.46 | Tucson (2)*. | 105 | 50 | 73.8 | 0.00? |
| Uniontown. | 94 | 67 | 80.9 | 8.73 | Volunteer Springs | 98 | 26? | 67.6 | 2.50 |
| Valley Head†. | 95 | 62 | 75.5 | 2.86 | Walnut Grove | ..... | ..... | ..... | 2.10 |
| Wiggins. | 102 e | 62 e | 82.86 | 7.41 | Wilcox* | 105 | 70 | 82.9 | 3.62 |
| <i>Arizona.</i> | | | | | | | | | |
| Antelope Valley. | ..... | ..... | ..... | 1.67 | Willow Springs (Apache county). | ..... | ..... | ..... | 2.74 |
| Ash Canyon. | 110 | ..... | ..... | 5.50 | Willow Spgs (Pinal county). | ..... | ..... | ..... | 3.06 |
| Banghart's. | 110 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

Meteorological record of voluntary observers, &c.—Continued.

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. |
|-------------------|-------------------------------|------|------|-----------|-------------------------------|-------------------------------|------|-------|-----------|
| | Max. | Min. | Mean | | | Max. | Min. | Mean | |
| | | | | | | | | | |
| Arizona—Cont'd. | o | o | o | Ins. | California—Cont'd. | o | o | o | Ins. |
| Winslow | 101 | 50 | 78.4 | 0.65 | King City* | 97 | 40 | 62.0 | o |
| Yuma* | 108 | 84 | 94.2 | 0.00 | Knight's Landing* | 104 | 47 | 71.2 | 0.00 |
| Arkansas | | | | | LaGrange | 110 | 54 | 81.5 | 0.00 |
| Arkansas City† | 96 | 58 | 78.8 | 5.57 | Lathrop* | 106 | 48 | 75.8 | 0.00 |
| Brinkley† | 94 | 67 | 79.5 | 4.15 | Laurel* | 98 | 55 | 70.1 | 0.00 |
| Camden† | 94 | 65 | 79.3 | 4.07 | Lemoore* | 111 | 63 | 85.9 | 0.00 |
| Conway | 94 | 63 | 80.6 | 3.16 | Livermore* | 98 | 52 | 66.8 | 0.00 |
| Dayton† | 96 | 63 | 81.7 | 5.75 | Livingston* | 110 | 60 | 82.1 | 0.00 |
| Devall's Bluff† | 98 | 58 | 81.0 | 2.84 | Long Beach | 96 | 64 | 72.2 | 0.00 |
| El Dorado† | 91 | 62 | 76.6 | 5.27 | Los Angeles* | 100 | 58 | 72.0 | 0.00 |
| Eureka Springs | 98 | 53 | 78.0 | 6.61 | Los Banos* | 110 | 62 | 81.8 | 0.00 |
| Forrest City† | 94 | 59 | 79.2 | 3.41 | Los Gatos* | 99 | 56 | 72.3 | 0.00 |
| Fulton† | | | | | Mammoth Tank* | 120 | 84 | 100.2 | 0.00 |
| Heber | 97 | 56 | 78.5 | 2.10 | Martinez* | 94 | 54 | 70.3 | 0.00 |
| Helena (1)† | | | | | Marysville* | 105 | 60 | 81.1 | 0.00 |
| Helena (2)† | 98 | 64 | 81.4 | 3.06 | Menlo Park* | 96 | 54 | 66.0 | 0.00 |
| Hot Springs | 98 | 55 | 78.7 | 5.48 | Merced* | 108 | 58 | 81.3 | 0.00 |
| Lead Hill† | 107 | 58 | 82.5 | 2.80 | Modesto* | 106 | 60 | 78.4 | 0.00 |
| Little Rock B'ks. | 95 | 65 | 80.5 | 3.30 | Mojave* | 111 | 70 | 89.1 | 0.00 |
| Lonoke | 97 | 64 | 82.2 | 3.62 | Montague* | 104 | 70 | 86.3 | 0.00 |
| Malvern† | 102 | 58 | 82.3 | 3.26 | Monterey* | 79 | 59 | 64.5 | 0.00 |
| Monticello† | 98 | 66 | 82.4 | 4.35 | Monterey (Hotel del Monte) | 78 | 60 | 67.2 | 0.00 |
| Newport (1)† | 98 | 60 | 80.2 | 4.63 | Mount Hamilton | 92 | 50 | 70.7 | 0.00 |
| Newport (2)† | | | | | Napa* | 98 | 53 | 67.0 | 0.00 |
| Oscoda† | 93 | 62 | 79.8 | 4.84 | National City† | 92 | 59 | 70.0 | 0.01 |
| Ozone† | 91 | 59 | 76.4 | 9.50 | Needles* | 119 | 77 | 98.8 | 0.00 |
| Pine Bluff† | 96 | 66 | 82.2 | 6.27 | Newark* | 90 | 57 | 66.8 | 0.00 |
| Prescott† | 94 | 64 | 80.4 | 4.16 | Newhall* | 112 | 55 | 77.2 | 0.00 |
| Russellville† | 97 | 60 | 81.8 | 12.00 | Newman* | 110 | 66 | 79.9 | 0.00 |
| Stuttgart† | 95 | 60 | 79.7 | 5.09 | Niles* | 95 | 55 | 68.3 | 0.00 |
| Texarkana† | 100 | 68 | 82.3 | 5.10 | Norwalk* | 99 | 60 | 73.3 | 0.00 |
| Washington† | 98 | 67 | 79.8 | 4.98 | Oakland (1)* | 84 | 53 | 59.8 | 0.00 |
| Winslow | 89 | 57 | 76.9 | 6.49 | Oakland (2)* | 70 | 50 | 62.0 | 0.00 |
| British Columbia. | | | | | Ontario* | 102 | 69 | 80.8 | 0.00 |
| New Westminster | 90 | 50 | 67.0 | 0.04 | Orland* | 112 | 65 | 86.7 | 0.00 |
| California. | | | | | Oroville* | 102 | 56 | 80.0 | 0.00 |
| Alcatraz Island | 65 | 48 | 55.5 | 0.00 | Pajaro* | 75 | 56 | 62.5 | 0.00 |
| Almaden* | 93 | 58 | 71.0 | 0.00 | Paso Robles* | 104 | 50 | 73.1 | 0.00 |
| American Hill* | 100 | 56 | 70.2 | 0.00 | Petaluma* | 97 | 52 | 65.2 | 0.00 |
| Anheim* | 104 | 58 | 73.0 | 0.00 | Placerville* | 103 | 61 | 79.1 | 0.00 |
| Anderson† | 110 | 62 | 87.0 | 0.00 | Pleasanton* | 100 | 61 | 74.6 | 0.00 |
| Angel Island | 81 | 48 | 61.5 | 0.00 | Rancho Cucamonga* | 104 | 52 | 60.0 | 0.00 |
| Antioch | 104 | 59 | 77.1 | 0.00 | Rancho Palos Verdes* | 102 | 66 | 80.0 | 0.00 |
| Apots* | 80 | 52 | 63.4 | 0.00 | Rancho Santa Margarita* | 104 | 52 | 60.0 | 0.00 |
| Athlone | 114 | 68 | 83.3 | 0.00 | Rancho San Antonio* | 104 | 52 | 60.0 | 0.00 |
| Auburn | 105 | 56 | 76.5 | 0.00 | Rancho San Elijo* | 104 | 52 | 60.0 | 0.00 |
| Bakersfield | 112 | 67 | 88.6 | 0.00 | Rancho San Fran- | 104 | 52 | 60.0 | 0.00 |
| Barstow | 112 | 60 | 87.5 | 0.00 | Rancho San Joaquin* | 104 | 52 | 60.0 | 0.00 |
| Beaumont | 113 | 70 | 86.4 | 0.00 | Rancho San Luis Obispo* | 104 | 52 | 60.0 | 0.00 |
| Benicia Barracks | 99 | 59 | 67.9 | 0.00 | Rancho San Pedro* | 104 | 52 | 60.0 | 0.00 |
| Berendo† | 113 | 66 | 84.6 | 0.00 | Rancho San Simeon* | 104 | 52 | 60.0 | 0.00 |
| Berkely | 85 | 52 | 58.6 | 0.00 | Rancho Santa Barbara* | 104 | 52 | 60.0 | 0.00 |
| Bishop Creek* | 114 | 79 | 93.2 | 0.00 | Rancho Santa Fe* | 104 | 52 | 60.0 | 0.00 |
| Borden* | 114 | 66 | 82.6 | 0.00 | Rancho Santa Ynez* | 104 | 52 | 60.0 | 0.00 |
| Brentwood* | 105 | 67 | 79.6 | 0.00 | Rancho Valencia* | 104 | 52 | 60.0 | 0.00 |
| Brighton* | 103 | 55 | 77.6 | 0.00 | Rancho Victoria* | 104 | 52 | 60.0 | 0.00 |
| Byron* | 108 | 66 | 81.6 | 0.00 | Rancho Yorba* | 104 | 52 | 60.0 | 0.00 |
| Cactus* | 122 | 83 | 99.5 | 0.00 | Rancho Ysleta* | 104 | 52 | 60.0 | 0.00 |
| Caliente* | 112 | 70 | 90.2 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Castiglo* | 104 | 48 | 67.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Castrovile* | 69 | 53 | 60.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Centreville* | 100 | 58 | 60.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Chico* | 114 | 65 | 85.2 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Cisco* | 88 | 49 | 64.3 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Colfax* | 102 | 60 | 77.3 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Colton* | 114 | 66 | 82.3 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Corning* | 111 | 64 | 88.2 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Crescent City | | | | | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Davisville* | 105 | 52 | 70.9 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Delano | 112 | 67 | 88.2 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Delta | 109 | 55 | 77.8 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Downey | 95 | 60 | 71.8 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Dunnigan | 105 | 60 | 78.4 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Edgewood* | 100 | 49 | 71.7 | 0.33 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| El Dorado† | 106 | 61 | 83.1 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Elmira* | 110 | 58 | 76.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Emigrant Gap* | 99 | 49 | 65.9 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Esperanza* | 108 | 52 | 80.9 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Evergreen | | | | | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Farmington* | 110 | 56 | 78.7 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Felton* | 98 | 45 | 67.2 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Florence | 95 | 60 | 71.6 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Folsom | 109 | 62 | 81.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Fort Bidwell | 99 | 44 | 72.1 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Fort Gaston | 110 | 40 | 60.8 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Fort Mason | 69 | 49 | 58.0 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Fresno* | 115 | 65 | 90.8 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Tehachapi* | 100 | 70 | 82.3 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Fruto* | 113 | 66 | 84.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Galt* | 106 | 62 | 77.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Georgetown* | 99 | 56 | 75.5 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Gilroy* | 97 | 55 | 68.6 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Girard* | 102 | 67 | 79.7 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Glen Ellen* | 103 | 52 | 67.7 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Goshen* | 110 | 63 | 88.9 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Hollister* | 97 | 56 | 68.8 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Hornbrook* | 107 | 60 | 79.9 | 0.00 | Rancho Yuma* | 104 | 52 | 60.0 | 0.00 |
| Hydesville† | 87 | 42 | 58.9 | 0.15 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Indio* | 114 | 82 | 96.4 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Ione* | 104 | 54 | 77.2 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Iowa Hill* | 100 | 67 | 77.3 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Jolon | 114 | 50 | 88.0 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Julian* | 101 | 65 | 78.2 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Keebler* | 107 | 69 | 83.2 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Keene* | 104 | 65 | 79.3 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Kingsburgh* | 112 | 70 | 87.9 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |
| Whittier* | 104 | 61 | 78.1 | 0.00 | Rancho Yuma* | 105 | 58 | 74.4 | 0.00 |

Meteorological record of voluntary observers, &c.—Continued.

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. |
|--------------------|-------------------------------|------|------|-----------|--------------------|-------------------------------|------|------|-----------|--------------------|-------------------------------|------|---|-----------|
| | Max. | Min. | Mean | | | Max. | Min. | Mean | | | Max. | Min. | | |
| | | | | | | | | | | | | | | |
| California—Cont'd. | o | o | o | Ins. | California—Cont'd. | o | o | o | Ins. | California—Cont'd. | o | o | o | Ins. |
| King City* | 97 | 40 | 62.0 | 0.00 | Williams* | 115 | | | | | | | | |

*Meteorological record of voluntary observers, &c.—Continued.**Meteorological record of voluntary observers, &c.—Continued.*

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. |
|-------------------|----------------------------|------|------|----------------|--------------------|----------------------------|------|-------|-----------------|-------------------|----------------------------|------|------|----------------|--------------------|----------------------------|------|------|-----------|
| | Max. | Min. | Mean | | | Max. | Min. | Mean | | | Max. | Min. | Mean | | | Max. | Min. | Mean | |
| Illinois—Cont'd. | o | o | o | Ins. | Kansas—Cont'd. | o | o | o | Ins. | Kentucky—Cont'd. | o | o | o | Ins. | Massachusetts—Con. | o | o | o | Ins. |
| Sycamore* | 93 | 51 | 69.6 | 4.48 | Atwood | o | o | o | 5.50 | McHenry f. | 97 | 62 | 75.7 | 4.36 | Fiskdale | o | o | o | 8.72 |
| Warsaw† | 52 | 33 | 3.28 | Augusta* | 100 | 62 | 78.3 | 3.84 | Mount Sterling† | 90 | 62 | 73.4 | 5.42 | Fitchburg (1)* | 86 | 53 | 68.2 | 7.17 | |
| Watseka | 95 | 52 | 71.9 | 6.54 | Bellville* | 94 | 52 | 65.5 | 6.55 | Newport Barracks | 93 | 58 | 75.2 | 4.21 | Fitchburg (2) | 84 | 50 | 68.4 | 7.35 |
| Wheaton | 93 | 60 | 69.3 | 5.21 | Bendena†* | 94 | 63 | 78.6 | 8.50 | Owenton fd. | 94 | 59 | 74.8 | 6.45 | Fort Warren | 85 | 52 | 68.1 | 7.87 |
| White Hall | 90 | 62 | 78.6 | 5.07 | Brookville* | 107 | 50 | 5.50 | 5.50 | Peludach† | 94 | 59 | 74.8 | 6.45 | Framingham | 88 | 50 | 70.4 | 9.34 |
| Willow Hill | 88 | 62 | 75.1 | 3.16 | Bucklin | 102 | 64 | 4.15 | 4.15 | Pellville† | 95 | 50 | 75.4 | 6.20 | Gilbertville | 86 | 45 | 68.4 | 9.63 |
| Windsor† | 94 | 57 | 75.0 | 5.79 | Buffalo Park* | 102 | 64 | 2.27 | 2.27 | Richmond* | 98 | 59 | 79.1 | 6.48 | Groton | 86 | 52 | 69.4 | 6.91 |
| Winnebago | 94 | 58 | 75.4 | 2.77 | Bunker Hill* | 106 | 62 | 3.99 | 3.99 | South Fork† | 94 | 55 | 75.8 | 8.41 | Heath* | 92 | 50 | 72.5 | ... |
| Indiana | | | | | Burnt Oak* | 97 | 47 | 75.9 | 11.75 | Springfield d. | 90 | 63 | 75.0 | 2.03 | Holyoke | 90 | 52 | 72.5 | 8.86 |
| Angola | 97 | 54 | 74.2 | 7.01 | Carneiro | 103 | 60 | 3.25 | 3.25 | Williamsburgh† | 92 | 55 | 72.8 | 4.90 | Lake Cochituate | 89 | 44 | 69.4 | 9.10 |
| Blue Lick | 89 | 60 | 74.2 | 7.63 | Cawker City* | 86 | 66 | 77.1 | 4.60 | Louisiana | | | | | Lawrence | 93 | 52 | 70.7 | 7.04 |
| Butlerville* | 64 | 76.1 | 5.65 | Colby | 103 | 42 | 74.0 | 2.41 | Leicester | 88 | 49 | 66.6 | 9.02 | Leicester | | | | | |
| Cannelton | 94 | 52 | 75.9 | 6.17 | Cold Water* | | | | | Long Plain | 84 | 58 | 70.6 | 5.17 | Long Plain | | | | |
| Columbia City | 93 | 50 | 70.2 | 4.35 | Collyer | 106 | 58 | 2.25 | 2.25 | Lowell (1) | 86 | 53 | 69.8 | 6.12 | Lowell (1) | | | | |
| Columbus | 90 | 60 | 73.2 | 4.26 | Conway* | 98 | 56 | 78.6 | 3.65 | Lowell (2) | 88 | 51 | 69.2 | ... | Lowell (2) | | | | |
| Countryside | 90 | 58 | 73.1 | 3.15 | Cunningham* | 99 | 59 | 76.7 | 5.24 | Lowell (3) | 88 | 54 | 70.9 | ... | Lowell (3) | | | | |
| Dana*d | 92 | 60 | 76.1 | 6.00 | Dorrance* | 104 | 54 | 4.90 | 4.90 | Ludlow | 86 | 42 | 66.6 | 9.05 | Ludlow | | | | |
| De Gonia Springs | 88 | 60 | 75.1 | 5.70 | Dwight | | | | | Lynn | 80 | 52 | 67.6 | 8.75 | Lynn | | | | |
| Delphia | 92 | 50 | 73.1 | 6.81 | Elk Falls† | 96 | 57 | 79.6 | 7.20 | Mansfield | 85 | 49 | 69.6 | 10.60 | Mansfield | | | | |
| Evansville† | | | | | Ellis (1) | 106 | 51 | 78.2 | 1.00 | Medford | | | | | Medford | | | | |
| Farmland | 92 | 60 | 73.7 | 5.25 | Ellis (2)* | 104 | 58 | 2.25 | 2.25 | Middleborough | 86 | 46 | 68.5 | 6.74 | Middleborough | | | | |
| Huntertown* | 92 | 60 | 74.2 | 2.13 | Ellsworth* | 102 | 60 | 2.60 | 2.60 | Milton* | 86 | 52 | 67.2 | 9.30 | Milton* | | | | |
| Huntingburgh | 94 | 62 | 77.3 | 6.26 | Englewood* | 102 | 62 | 80.1 | 7.59 | Monson | 87 | 43 | 68.0 | 8.12 | Monson | | | | |
| Huntington† | | | | | Fort Hays | 106 | 52 | 76.6 | 3.21 | Mount Nonotuck | | | | | Mount Nonotuck | | | | |
| Jeffersonville | 92 | 58 | 76.2 | 3.38 | Ft. Leavenworth(1) | 93 | 55 | 76.6 | 3.21 | Mystic Lake | | | | | Mystic Lake | | | | |
| La Fayette | 95 | 53 | 73.1 | 5.29 | Ft. Leavenworth(2) | 91 | 58 | 6.00 | 3.39 | New Providence | 82 | 53 | 65.6 | 8.09 | New Providence | | | | |
| Logansport† | | | | | Fort Riley | 98 | 55 | 77.4 | 6.92 | Point Isabel | 82 | 53 | 65.6 | 6.28 | Point Isabel | | | | |
| Marengo | 90 | 59 | 76.4 | 10.50 | Fort Scott | | | | | Princeton | 83 | 53 | 67.3 | 5.45 | Princeton | | | | |
| Marion | 92 | 54 | 72.7 | 3.10 | Fremont | 100 | 41 | 76.4 | 6.50 | Roxbury | 83 | 52 | 68.1 | 5.44 | Roxbury | | | | |
| Mauzy* | 92 | 53 | 72.7 | 3.92 | Gibson | 114 | 47 | 79.3 | 1.20 | Springfield Arm'y | 88 | 53 | 71.4 | 9.08 | Springfield Arm'y | | | | |
| Mount Vernon(1)† | 96 | 51 | 73.2 | 4.22 | Globe* | 93 | 62 | 76.4 | 5.85 | Swampscott | 82 | 53 | 66.8 | 7.16 | Swampscott | | | | |
| Mount Vernon(2)* | 94 | 58 | 76.0 | 5.94 | Gognac | 104 | | | | Taunton (1) | 89 | 51 | 68.6 | 8.46 | Taunton (1) | | | | |
| Muncie | 96 | 51 | 73.5 | 4.45 | Gorham* | 104 | 63 | 5.40 | 5.40 | Taunton (2) | 87 | 48 | 69.0 | 9.68 | Taunton (2) | | | | |
| New Providence | 94 | 56 | 76.8 | 4.45 | Grainfield* | 98 | 44 | 1.10 | 1.10 | Waltham | 88 | 58 | 69.8 | 12.38 | Waltham | | | | |
| Point Isabel* | 98 | 54 | 75.1 | 5.03 | Grenola* | 102 | 52 | 76.6 | 3.50 | Wellesley | 89 | 49 | 69.0 | 9.21 | Wellesley | | | | |
| Princeton† | 96 | 60 | 76.7 | 3.55 | Grinnell* | 106 | 60 | 4.24 | 4.24 | Westborough* | 94 | 49 | 72.7 | 8.54 | Westborough* | | | | |
| Richmond | 91 | 54 | 74.0 | 4.00 | Halstead | 96 | 56 | 77.5 | 2.99 | Williamstown | 82 | 49 | 67.9 | 5.81 | Williamstown | | | | |
| Rockville | 94 | 62 | 73.0 | 6.25 | Havenside* | 99 | 58 | 75.9 | 8.50 | Winchester | | | | | Winchester | | | | |
| Rushville† | | | | | Hays City* | 108 | 65 | 2.90 | 2.90 | Worcester (1)* | 85 | 55 | 69.6 | 8.23 | Worcester (1) | | | | |
| Salem† | | | | | Hill City p. | | | | | Worcester (2) | 87 | 54 | 79.0 | ... | Worcester (2) | | | | |
| Scalesville | 93 | 64 | 77.2 | 7.68 | Horton* | 94 | 58 | 72.1 | 6.13 | Winnfield* | 92 | 74 | 84.3 | 10.30 | Mexico | | | | |
| Seymour | 88 | 62 | 72.9 | 6.74 | Hoxie* | | | | | Winnfield* | 90 | 54 | 82.4 | 3.75 | Guamauato | 83 | 52 | 67.5 | 2.80 |
| Shelbyville | 90 | 60 | 74.6 | 3.92 | Hugoton | 105 | 63 | 80.0 | 2.70 | Winnfield* | 87 | 51 | 81.5 | 4.78 | Leon de Aldemar | 83 | 52 | 71.6 | 4.72 |
| Spiceland | 94 | 54 | 74.0 | 6.03 | Hymen | | | | | Winnfield* | 85 | 58 | 82.8 | 5.05 | Mazatlan | 89 | 56 | 71.6 | 4.72 |
| Sumner† | 92* | 53 | 75.4 | 5.30 | Independence* | 101 | 58 | 78.8 | 7.27 | Winnfield* | 83 | 51 | 82.7 | 2.13 | Mazatlan | 89 | 56 | 71.6 | 4.72 |
| Vevay | 94 | 57 | 75.3 | 6.93 | Junction City | 101 | 58 | 78.8 | 7.27 | Winnfield* | 81 | 51 | 80.8 | 2.28 | Springfield Arm'y | 88 | 53 | 71.4 | 9.08 |
| Vincennes† | | | | | Manhattan (1)† | 98 | 59 | 75.1 | 8.14 | Winnfield* | 79 | 50 | 82.7 | 4.42 | Swampscott | 82 | 53 | 66.8 | 7.16 |
| Worthington | 86 | 63 | 73.1 | 6.40 | Manhattan (2)* | 96 | 62 | 77.3 | 10.28 | Winnfield* | 77 | 50 | 82.7 | 4.42 | Taunton (1) | 89 | 51 | 68.6 | 8.46 |
| Indiana Territory | | | | | Manhattan (3)* | 96 | 62 | 77.3 | 3.05 | Winnfield* | 75 | 50 | 81.6 | 5.72 | Taunton (2) | 87 | 48 | 69.0 | 9.68 |
| Caddo Creek*g | 96 | 72 | 82.4 | .... | Marmaton | 93 | 52 | 76.0 | 3.50 | Winnfield* | 73 | 50 | 82.9 | 6.61 | Waltham | | | | |
| Cantonton† | | | | | McAllister* | 108 | 60 | 80.1 | 2.17 | Winnfield* | 71 | 51 | 82.2 | 8.64 | Wellesley | | | | |
| Eufaula† | | | | | Macksville* | 100 | 52 | 77.0 | 4.70 | Winnfield* | 69 | 51 | 84.5 | 5.05 | Westborough* | | | | |
| Fort Gibson | 100 | 60 | 81.5 | 0.64 | Manhattan (4)† | 98 | 60 | 78.2 | 7.73 | Winnfield* | 67 | 51 | 81.8 | 4.63 | Williamstown | | | | |
| Fort Reno | 103 | 65 | 80.0 | 2.54 | Marmaton | 93 | 52 | 76.7 | 1.88 | Winnfield* | 65 | 51 | 83.2 | 4.50 | Winchester | | | | |
| Fort Sill | 104 | 58 | 80.2 | 1.81 | McAllister* | 108 | 65 | 80.3 | 0.65 | Winnfield* | 63 | 51 | 82.5 | 7.45 | Worcester (1) | 85 | 55 | 69.6 | 8.23 |
| For Supply | 111 | 51 | 80.1 | 2.17 | Macksville* | 100 | 52 | 77.0 | 4.70 | Winnfield* | 61 | 51 | 83.0 | 3.24 | Worcester (2) | 87 | 54 | 79.0 | ... |
| Jintown† | 88 | 57 | 72.9 | 0.58 | Manhattan (2)† | 98 | 59 | 75.1 | 9.59 | Winnfield* | 59 | 51 | 84.3 | 10.30 | Mexico | | | | |
| Lehigh | 64 | 80.0 | 2.47 | Manhattan (3)* | 96 | 62 | 77.3 | 10.28 | Winnfield* | 57 | 50 | 82.4 | 3.75 | Guamauato | 83 | 52 | 67.5 | 2.80 | |
| Oklahoma City | 100 | 56 | 79.0 | 2.21 | Marmaton | 93 | 52 | 76.0 | 3.05 | Winnfield* | 55 | 50 | 82.4 | 3.75 | Leon de Aldemar | 83 | 52 | 71.6 | 4.72 |
| Tulsa† | | | | | McAllister* | 108 | 60 | 80.0 | 3.35 | Winnfield* | 53 | 50 | 84.5 | 5.05 | Mazatlan | 89 | 56 | 71.6 | 4.72 |
| Woodward | | | | | Monument* | 108 | 60 | 76.0 | 1.60 | Winnfield* | 51 | 50 | 82.4 | 3.75 | Springfield Arm'y | 88 | 53 | 71.4 | 9.08 |
| Iowa | | | | | Morse* | 90 | 50 | 70.4 | 3.75 | Winnfield* | 49 | 50 | 82.4 | 2.96 | Swampscott | 82 | 53 | 66.8 | 7.16 |
| Amanut | 94 | 46 | 73.3 | 3.95 | Oberlin† | 106 | 58 | 76.0 | 5.56 | Winnfield* | 47 | 50 | 82.4 | 2.96 | Toronto (1) | 89 | 51 | 68.6 | 8.23 |
| Aines | 92 | 50 | 72.3 | 4.10 | Ogallala | | | | | Winnfield* | 45 | 50 | 82.7 | 2.13 | Toronto (2) | 87 | 48 | 69.0 | 3.32 |
| Bancroft | 95 | 46 | 72.5 | 3.45 | Ottawa | | | | | Winnfield* | 43 | 50 | 82.7 | 2.13 | Winnfield* | 82 | 53 | 71.6 | 4.72 |
| Blakeville | 102 | 60 | 72.6 | 1.50 | Quinter* | 100 | 60 | 76.0 | 4.40 | Winnfield* | 41 | 50 | 82.7 | 2.13 | Winnfield* | 80 | 51 | 65.1 | 3 |

*Meteorological record of voluntary observers, &c.—Continued.**Meteorological record of voluntary observers, &c.—Continued.*

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | |
|-------------------|-------------------------------|-------|-------|---------------|---------------------|-------------------------------|-------|-------|--------------------|---------------------|-------------------------------|-------|-------|---------------|--------------------|-------------------------------|-------|-------|-------|
| | Max. | Min. | Mean | | | Max. | Min. | Mean | | | Max. | Min. | Mean | | | Max. | Min. | Mean | |
| Michigan—Cont'd. | 90 | 55 | 72.3 | 2.90 | Mississippi—Cont'd. | 90 | 66 | 83.4 | 3.72 | Nevada—Cont'd. | 90 | 60 | 79.0 | 0.00 | New Mexico—Cont'd. | 90 | 60 | 78.0 | 1.47 |
| Hart | 95 | 55 | 72.3 | 2.90 | Water Valley | 100 | 55 | 79.3 | 5.11 | Crane's Ranch | 90 | 52 | 79.4 | T. | Gallinas Spring | 95 | 60 | 76.6 | 4.19 |
| Hastings | 91 | 49 | 70.5 | 1.52 | Waynesboro (1) f. | 95 | 55 | 82.2 | 5.05 | Downeyville | 105 | 69 | 96.9 | 2.32 | Hillsborough | 100 | 57 | 76.6 | 4.19 |
| Highland Station | 98 | 58 | 73.8 | 1.16 | Waynesboro (2) f. | 96 | 66 | 82.2 | 5.05 | El Dorado | 119 | 69 | 96.9 | 0.00 | Last Vegas | 97 | 48 | 72.0 | 4.30 |
| Hillman | 95 | 38 | 66.7 | 1.02 | Yazoo City f. | ..... | ..... | ..... | 5.85 | Elko (1) | 107 | 56 | 73.3 | 0.00 | Lordsburg | 105 | 70 | 85.2 | 1.70 |
| Hilldale | 89 | 50 | 71.1 | 1.69 | Missouri. | ..... | ..... | ..... | ..... | Elko (2) | 108 | 36 | 69.0 | 0.00 | Los Lunas | 101 | 56 | 78.6 | 0.21 |
| Hudson | 92 | 45 | 68.4 | 4.07 | Boonville | ..... | ..... | ..... | 4.56 | Ely | 99 | 48 | 74.0 | 0.00 | Nogal | ..... | ..... | ..... | 2.39 |
| Ionia | 95 | 48 | 70.2 | 2.70 | Carthage | ..... | ..... | ..... | 1.46 | Eureka | 106 | 44 | 74.5 | 0.01 | Red Cañon | ..... | ..... | ..... | 1.26 |
| Ivan | 93 | 43 | 67.0 | 1.89 | Conception | 90 | 54 | 79.4 | 2.71 | Fenelon | 98 | 58 | 79.3 | 0.00 | Springer | ..... | ..... | ..... | 3.71 |
| Jeddo | 95 | 60 | 75.6 | 1.59 | Excelsior Springs | 97 | 51 | 76.0 | 5.48 | Ferguson's Ranch | 104 | 51 | 75.8 | 0.00 | New York. | ..... | ..... | ..... | ..... |
| Kalamazoo | 90 | 53 | 70.8 | 4.82 | Fox Creek | 90 | 60 | 76.7 | 2.58 | Genoa | 98 | 44 | 69.6 | 0.00 | Alfred Centre | 86 | 45 | 65.8 | 4.47 |
| Lansing | 90 | 48 | 70.0 | 2.67 | Frankford (1) * | 98 | 46 | 73.3 | 3.69 | Golconda | 104 | 67 | 82.1 | 0.00 | Angelica | 88* | 44 | 67.4 | 5.00 |
| Lathrop | 102 | 40 | 67.5 | 3.02 | Glasgow | 99 | 52 | 75.2 | 4.60 | Halleck | 110 | 59 | 77.8 | 0.00 | Arcade | 91 | 42 | 67.1 | 4.65 |
| Madison | 98 | 48 | 72.2 | 4.25 | Grand Pass | 94 | 54 | 75.4 | 3.74 | Hawthorne (1) | 106 | 66 | 84.5 | 0.00 | Ardenia | 88 | 61 | 71.2 | 9.28 |
| Marshall | 94 | 49 | 70.9 | 2.35 | Hermann | ..... | ..... | ..... | 2.22 | Hawthorne (2) | 102 | 55 | 77.4 | 0.10 | Auburn | 88 | 61 | 69.6 | 7.96 |
| May | 78 | 50 | 67.4 | 3.55 | Ironton | 91 | 62 | 76.8 | 6.62 | Hot Springs (1) | 115 | 60 | 81.5 | 0.00 | Boyd's Corners | 90 | 61 | 72.8 | 7.19 |
| Mio | 92 | 41 | 66.9 | 1.33 | Jefferson Barracks | 95 | 53 | 76.8 | 1.28 | Hot Springs (2) | 115 | 60 | 79.4 | 0.00 | Canton | 92* | 50 | 68.1 | 8.25 |
| Montague | 84 | 47 | 65.0 | 3.94 | Jerome | ..... | ..... | ..... | ..... | Humboldt (1) | 106 | 58 | 75.7 | 0.00 | Constableville | 88 | 50 | 67.4 | 7.13 |
| Mottville | 89 | 49 | 67.9 | 3.17 | Kansas City | 98 | 56 | 78.2 | 3.42 | Humboldt (2) | 106 | 58 | 72.8 | 0.00 | Cooperstown | 85 | 53 | 66.9 | 5.61 |
| Noble | ..... | ..... | ..... | ..... | Kirksville | 99 | 52 | 75.7 | 1.83 | Lewer's Ranch | 100 | 42 | 74.8 | T. | Davids Island | 90 | 51 | 71.1 | 13.12 |
| North Adams | 92 | 36 | 69.2 | 2.19 | Lamont | 99 | 62 | 79.3 | 1.79 | Mill City | 116 | 57 | 79.0 | 0.00 | Eden | 90 | 56 | 73.6 | 4.43 |
| North Aurelius | ..... | ..... | ..... | ..... | Longdon | ..... | ..... | ..... | 2.36 | Palisade | 110 | 60 | 77.8 | 0.00 | Elmira | 89 | 53 | 73.2 | 3.98 |
| North Marshall | 89 | 42 | 68.8 | 2.43 | Louisiana Bridge | 98 | 60 | 72.3 | 0.00 | Pioche | 104 | 48 | 74.6 | 0.79 | Factoryville | 88 | 45 | 69.0 | 5.89 |
| Olivet | 87 | 41 | 67.8 | 1.83 | Mexico | 98 | 60 | 72.1 | 0.00 | Punch Bowl | 94 | 49 | 70.9 | 0.00 | Fleming | 92 | 52 | 69.7 | 8.79 |
| Otsego | 90 | 40 | 68.7 | 0.00 | Miami | 102 | 56 | 5.60 | ..... | Reno | 102 | 57 | 77.0 | 0.00 | Fort Columbus | 91 | 56 | 73.8 | 8.79 |
| Ovid | 93 | 48 | 70.1 | 2.56 | New Frankfort | 98 | 60 | 78.4 | 2.15 | Reno, State Univ'ty | 100 | 45 | 77.0 | T. | Fort Hamilton | 87 | 62 | 72.1 | 7.54 |
| Paw Paw | 91 | 48 | 72.0 | 4.89 | New Haven | 96 | 60 | 80.1 | 0.00 | Ruby Hill | 90 | 40 | 67.7 | T. | Fort Niagara | 93 | 56 | 72.7 | 2.08 |
| Petersburgh | 92 | 47 | 70.4 | 2.31 | Oregon | 91 | 56 | 73.5 | 4.52 | Saint Clair | 103 | 54 | 75.6 | 0.00 | Fort Porter | 88 | 51 | 70.2 | 3.58 |
| Pontiac | 86 | 53 | 70.6 | 1.57 | Ozark | 98 | 65 | 71.4 | 4.28 | Sodaville | 109 | 57 | 81.8 | 0.00 | Fort Schuyler | 88 | 57 | 72.1 | 10.09 |
| Pulaski | ..... | ..... | ..... | ..... | Princeton | 98 | 46 | 79.0 | 0.00 | Tecoma | 104 | 60 | 82.7 | 0.00 | Fort Wadsworth | 92 | 54 | 73.4 | 8.28 |
| Rawsonville | 96 | 50 | 70.0 | 1.70 | Saint Charles (1) | ..... | ..... | ..... | 4.80 | Toano | 103 | 56 | 82.5 | 0.00 | Genova | 95 | 48 | 70.8 | 5.31 |
| Roscommon | 96 | 37 | 65.3 | 2.53 | Saint Joseph | 100 | 56 | 80.8 | 1.02 | Tucarorara | 98 | 37 | 68.6 | T. | Hess Road Sta. | 91 | 42 | 70.1 | 6.98 |
| Saint Ignace | ..... | ..... | ..... | ..... | Sedalia | 100 | 56 | 80.8 | 0.00 | Verdi | 105 | 57 | 73.9 | 0.00 | Honeymead Brook | 88 | 48 | 68.1 | 8.99 |
| Saint John's | 92 | 51 | 71.1 | 2.66 | Shelbina | ..... | ..... | ..... | 3.40 | Virginia City | 96 | 52 | 76.6 | 0.00 | Humphrey | 87 | 53 | 69.4 | 3.16 |
| Sand Beach | 91 | 50 | 69.0 | 1.81 | Steelville | 94 | 51 | 76.1 | 0.00 | Wadsworth | 106 | 65 | 83.9 | 0.00 | Iliion | 90 | 47 | 68.8 | 6.86 |
| Standish | 96 | 44 | 64.0 | 1.65 | Willow Springs | 92 | 53 | 6.90 | 0.00 | Wells | 105 | 52 | 80.3 | 0.00 | Ithaca | 92 | 50 | 70.2 | 6.73 |
| Stanton | 89 | 47 | 68.4 | 4.20 | Wither's Mill | ..... | ..... | ..... | 2.45 | Winnemucca | 102 | 60 | 79.3 | 0.00 | Kingston | 95 | 44 | 73.2 | 9.05 |
| Stockbridge | ..... | ..... | ..... | Montana. | ..... | ..... | ..... | ..... | New Hampshire. | ..... | ..... | ..... | ..... | Lyons | 95 | 53 | 70.7 | 6.03 | |
| Traverse City (1) | 95 | 43 | 65.4 | 2.63 | Camp Poplar River | 99 | 41 | 67.1 | 0.50 | Belmont | ..... | ..... | ..... | 4.64 | Madison Barracks | 90 | 36 | 67.6 | 3.91 |
| Traverse City (2) | 93 | 44 | 65.5 | 3.35 | Custer | 91 | 47 | 66.6 | 3.14 | Berlin Falls | 97 | 33 | 64.1 | 0.00 | Middleburgh | 91 | 44 | 69.9 | 4.45 |
| Thornville | 92 | 59 | 71.7 | 1.90 | Fort Assiniboine | 91 | 47 | 69.3 | 0.00 | Berlin Mills | 92 | 57 | 72.2 | 5.00 | Newfane Station | 64 | 74 | 0.00 | ..... |
| Vandalia | ..... | ..... | ..... | Fort Custer | 95 | 41 | 69.3 | 0.76 | Concord | 85 | 51 | 67.8 | 5.63 | Nineveh | 90 | 56 | 70.2 | 6.25 | |
| Vienna | ..... | ..... | ..... | Fort Keogh | 101 | 46 | 73.0 | 0.37 | Bristol | ..... | ..... | ..... | ..... | North Hammond | 94 | 57 | 72.0 | 4.08 | |
| Washington | 90 | 47 | 67.8 | 2.58 | Fort Logan | 88 | 31 | 62.0 | 0.62 | Concord | 85 | 51 | 54.5 | 0.00 | Number Four | 84 | 40 | 64.6 | 5.02 |
| Weldon Creek | ..... | ..... | ..... | Fort Maginnis | 94 | 37 | 65.2 | 0.87 | Hanover | 89 | 48 | 69.5 | 3.86 | Palermo | 87 | 47 | 68.4 | 3.61 | |
| West Branch | 91 | 44 | 57.0 | 2.44 | Fort Missoula | 96 | 37 | 67.6 | 0.00 | Lake Village | ..... | ..... | ..... | ..... | Palmyra | 92 | 60 | 72.6 | 0.00 |
| Williamston | 88 | 55 | 70.3 | 3.15 | Fort Shaw | 95 | 35 | 65.8 | 0.56 | Manchester (1) | 86 | 48 | 68.8 | 6.65 | Pendleton Centre | 60 | 60 | 69.6 | 0.00 |
| Ypsilanti (1) | 92 | 49 | 70.4 | 2.43 | Galpin | ..... | ..... | ..... | 0.41 | Manchester (2) | 87 | 51 | 69.1 | 7.01 | Perry City | 91 | 50 | 67.6 | 7.07 |
| Ypsilanti (2) | 91* | 52 | 70.7 | 2.68 | Glendale | 99 | 36 | 62.3 | 1.39 | Mine Falls | ..... | ..... | ..... | 4.64 | Plattsburgh B'ks | 86 | 50 | 69.3 | 5.62 |
| Minnesota. | ..... | ..... | ..... | Kintyrot | ..... | ..... | ..... | 0.95 | Nashua | 88 | 50 | 68.7 | 7.00 | Potsdam | 89 | 52 | 70.2 | 7.87 | |
| Alexandria | 98 | 56 | 70.4 | 3.57 | Powder River | 106 | 57 | 78.4 | 0.00 | Newton | 86 | 45 | 67.6 | 7.00 | Queensbury | 80 | 60 | 69.2 | 5.08 |
| Brainard | ..... | ..... | ..... | Sheldon | 94 | 40 | 66.9 | 0.20 | North Chesterfield | 87 | 40 | 63.9 | 7.35 | Rome | 89 | 52 | 69.6 | 6.56 | |
| Farmington | 100 | 52 | 71.9 | 1.80 | Virginia City | 92 | 29 | 65.7 | 0.00 | North Conway | 86 | 42 | 66.6 | 6.02 | Savona | 92 | 43 | 69.2 | 5.44 |
| Fergus Falls | ..... | ..... | ..... | Nebraska. | ..... | ..... | ..... | ..... | North Sutton | 54 | 56 | 65.6 | 0.00 | Setauket | 86 | 58 | 71.4 | 6.04 | |
| Fort Ripley | ..... | ..... | ..... | Ansley | 105 | 43 | 71.2 | 8.90 | Pennichuck Sta. | ..... | ..... | ..... | ..... | Somerset | 86 | 62 | 71.2 | 0.00 | |
| Fort Snelling | 100 | 48 | 71.5 | 2.15 | Ashland | 98 | 50 | 74.2 | 8.94 | Plymouth | 92 | 42 | 67.8 | 4.67 | South Canisteo | 86 | 53 | 67.6 | 9.25 |
| Grand Meadow | 98 | 52 | 70.9 | 2.64 | Bingham | 103 | 48 | 70.4 | 1.29 | Shaker Village | 84 | 47 | 61.0 | 5.44 | Tannersville | 80 | 50 | 65.4 | 5.52 |
| L. Winnibigoshish | 89 | 53 | 66.9 | 3.59 | Brownville | 92 | 54 | 76.3 | 5.19 | Stratford | 96 | 40 | 66.6 | 6.02 | Utica | 100 | 40 | 66.2 | 10.20 |
| Leech Lake | 90 | 39 | 63.4 | 4.98 | Craig | 94 | 57 | 73.0 | 6.00 | Walpole | 84 | 49 | 65.3 | 7.40 | Watervliet Arsenal | 88 | 51 | 70.3 | 5.55 |
| Le Sueur | 95 | 54 | 73.1 | 2.33 | Creighton | 102 | 44 | 71.0 | 7.88 | West Milan | 86 | 40 | 60.0 | 4.64 | Wedgewood | 93 | 52 | 70.4 | 7.16 |
| Mankato | 95 | 49 | 70.8 | 4.02 | Mankato | 95 | 50 | 73.2 | 3.72 | Weir's Bridge | ..... | ..... | ..... | 3.23 | West Point | 89 | 50 | 70.7 | 9.92 |
| Medford | 92 | 43 | 68.6 | 3.68 | Culbertson (1) | 108 | 42 | 75.4 | 6.62 | Wolborough | ..... | ..... | ..... | 5.11 | White Plains | 85 | 58 | 70.9 | 14.07 |
| Medford | 90 | 45 | 68.3 | 3.69 | | | | | | | | | | | | | | | |

Meteorological record of voluntary observers, &c.—Continued.

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. |
|--------------------|-------------------------------|-------|-------|------------------|-------------------|-------------------------------|-------|-------|-----------|
| | Max. | Min. | Mean. | | | Max. | Min. | Mean. | |
| Ohio—Cont'd. | o | o | o | Ins. | Pennsylvania—Con. | o | o | o | Ins. |
| Georgetown | 96 | 54 | 74.6 | 4.58 | Petersburgh | 97 | 49 | 70.1 | 5.47 |
| Granville | 92 | 53 | 72.3 | 3.76 | Philippsburgh | 94 | 48 | 69.4 | 5.21 |
| Greenville | 86 | 50 | 71.7 | 4.31 | Pleasant Mount | ..... | 55 | 69.6 | 7.59 |
| Hanging Rock | 93 | 56 | 72.8 | 5.93 | Point Pleasant | ..... | ..... | ..... | 12.30 |
| Hiram | 89 | 53 | 71.1 | 2.35 | Pottstown | 92 | 56 | 74.4 | 12.50 |
| Jacksonborough | 93 | 61 | 76.1 | 2.45 | Quakertown | 92 | 48 | 70.8 | 11.54 |
| Jefferson | 88 | 49 | 67.9 | 4.10 | Reading | 92 | 50 | 73.6 | 9.30 |
| Kent | 93 | 50 | 72.4 | 3.49 | Rimersburgh | 92 | 56 | 75.0 | ..... |
| Kenton | 92 | 55 | 70.2 | 4.59 | Salem Corners | 84 | 49 | 67.2 | 6.74 |
| Leipsic | 94 | 62 | 78.0 | ..... | Saltzburg | ..... | ..... | 3.03 | ..... |
| Logan | 97 | 52 | 72.0 | 10.83 | Seishtozville | ..... | ..... | 11.76 | ..... |
| Lordstown | 92 | 42 | 70.8 | 2.35 | Selin's Grove | 89 | 57 | 74.4 | 4.29 |
| Mansfield | 92 | 44 | 70.8 | 2.35 | Smith's Corners | ..... | ..... | 12.30 | ..... |
| Marietta(2) | 90 | 56 | 74.2 | 9.50 | Somerset | 89 | 45 | 68.5 | 5.06 |
| McConnellsburg | 95 | 54 | 73.4 | 4.22 | State College | 90 | 57 | 70.9 | 4.68 |
| Napoleon | 96 | 53 | 74.3 | 4.95 | Swarthmore | 91 | 56 | 73.6 | 8.74 |
| New Alexandria | 92 | 52 | 72.0 | 4.84 | Troy | 95 | 50 | 69.4 | 6.91 |
| New Athens | 96 | 51 | 75.6 | 6.23 | Tuscarora | 96 | 63 | 76.4 | 6.95 |
| New Comerstown | 94 | 50 | 72.6 | 4.91 | Uniontown | 89 | 52 | 74.0 | 4.81 |
| North Lewisburgh | 96 | 55 | 74.7 | 3.25 | Warren | ..... | ..... | 5.42 | ..... |
| Oberlin | 90 | 51 | 70.8 | 2.18 | Wellsborough | 90 | 42 | 68.6 | 3.06 |
| O. S. University | 92 | 49 | 73.0 | 2.68 | West Chester | 90 | 55 | 73.0 | 12.57 |
| Orangeville | 86 | 52 | 70.6 | 1.80 | Wysox | 91 | 44 | 69.2 | 5.17 |
| Ottawat | ..... | ..... | 1.74 | York | 95 | 52 | 74.5 | 4.34 | |
| Poland | ..... | 50 | 69.9 | 3.01 | Rhode Island | ..... | ..... | ..... | ..... |
| Pomeroy | 96 | 55 | 77.5 | 7.05 | Bristol | 86 | 52 | 69.2 | 6.63 |
| Portsmouth(1) | ..... | ..... | 7.71 | Fort Adams | 89 | 52 | 67.9 | 5.28 | |
| Portsmouth(2) | 94 | 56 | 73.9 | 7.56 | Kingston(1) | 86 | 51 | 67.9 | 8.30 |
| Shanesville | 93 | 62 | 74.0 | ..... | Kingston(2) | 89 | 50 | 65.7 | 8.70 |
| Shiloh | 90 | 49 | 67.6 | 3.40 | Lonsdale | ..... | ..... | 9.90 | ..... |
| Sidney | 95 | 50 | 74.1 | 8.32 | Newport | 82 | 56 | 68.8 | ..... |
| Springborough | ..... | ..... | 2.74 | Oleyneville | 89 | 55 | 72.8 | 10.68 | |
| Tiffin | 91 | 50 | 72.8 | 2.23 | Pawtucket | ..... | ..... | ..... | ..... |
| Upper Sandusky | 92 | 49 | 72.6 | 3.35 | Providence(1) | 90 | 54 | 71.2 | 9.49 |
| Vienna | 95 | 51 | 70.8 | 2.34 | Woonsocket | 86 | 53 | 70.6 | 11.41 |
| Wapakoneta | 98 | 49 | ..... | South Carolina | ..... | ..... | ..... | ..... |  |
| Wauseon | 93 | 46 | 71.4 | 4.82 | Allendale | 98 | 70 | 81.6 | 6.16 |
| Waverly | 94 | 59 | 76.0 | 5.44 | Bathsburgh | 95 | 66 | 77.8 | 9.08 |
| Waynesville | ..... | ..... | 2.31 | Beaufort | 95 | 76 | 85.6 | 4.72 | |
| Westerville | 92 | 52 | 71.2 | 3.89 | Bolmont | 93 | 64 | 78.5 | 6.23 |
| West Milton | 98 | 58 | 76.4 | 5.85 | Blackville | 100 | 64 | 81.4 | 6.52 |
| Weymouth | ..... | ..... | 3.23 | Branchville | 96 | 59 | 79.9 | 5.53 | |
| Wooster | 92 | 48 | 70.0 | 6.73 | Brewer Mine | 99 | 55 | 77.0 | 7.58 |
| Yellow Springs | 90 | 54 | 72.6 | 2.07 | Cedar Springs | 95 | 51 | 76.6 | 8.33 |
| Youngstown | 92 | 51 | 72.5 | 1.83 | Cheraw | 98 | 62 | 81.0 | 10.89 |
| Oregon. | ..... | ..... | ..... | Chester | 100 | 63 | 80.3 | 5.67 | |
| Albany | 96 | 48 | 69.9 | 0.00 | Clinton | 95 | 68 | 80.5 | 3.23 |
| Ashland | 97 | 60 | 78.9 | 1.25 | Columbus Ex. St. | 96 | 64 | 80.0 | 9.26 |
| Bandon | 71 | 50 | 57.7 | 0.17 | Conway | 93 | 68 | 80.5 | 10.31 |
| East Portland | 96 | 52 | ..... | Evergreen | 94 | 62 | 78.0 | 6.27 | |
| Eola | 94 | 56 | 70.3 | 0.00 | Florence | 100 | 64 | 81.6 | 5.89 |
| Fort Klamath | 98 | 25 | 64.6 | 0.27 | Greenville | 94 | 40 | 78.3 | 7.99 |
| Grant's Pass | 104 | 40 | 75.4 | 0.00 | Greenwood | 102 | 64 | 80.0 | 6.81 |
| Heppner | 101 | 42 | 72.3 | 1.12 | Hardesvillet | 98 | 70 | 82.8 | 9.83 |
| La Grande | 95 | 47 | 70.6 | 0.33 | Jacksonborough | 98 | 64 | 74.8 | 5.89 |
| Mount Angel | 96 | 44 | 71.5 | 0.00 | Kingstreet | 96 | 69 | 79.6 | 6.82 |
| Parkers | ..... | ..... | 0.19 | Kirkwood | ..... | 65 | 75.8 | 9.95 | |
| Siskiyou | 99 | 53 | 74.3 | 0.85 | Port Royal | 95 | 80 | 74.7 | 4.72 |
| Tillamook | 85 | 53 | 61.1 | 0.14 | Saint Georges | 98 | 64 | 80.6 | 6.83 |
| Pennsylvania. | ..... | ..... | ..... | Saint Matthew | 96 | 64 | 80.0 | 9.38 | |
| Allegheny Arsenal | 94 | 53 | 74.4 | 5.52 | Simpson | 93 | 67 | 78.7 | 5.09 |
| Altoona | 93 | 55 | 74.6 | 4.60 | Spartanburgh(2) | 104 | 50 | 74.4 | 3.47 |
| Aqueduct | 96 | 60 | 75.0 | 5.86 | Statesburgh | 92 | 64 | 77.9 | 6.27 |
| Bethlehem | 94 | 54 | 74.0 | 9.93 | Timmonsville | 90 | 72 | 81.0 | 2.70 |
| Blooming Grove | 92 | 58 | 71.2 | 11.00 | Trial | 96 | 63 | 79.5 | 5.54 |
| Blue Knob | 94 | 49 | 71.5 | 0.55 | Walhalla | 87 | 70 | 78.5 | 8.20 |
| Brookville | ..... | ..... | 4.13 | Winnisborough | 95 | 62 | 78.5 | 6.16 | |
| Catawissa | 91 | 52 | 72.6 | 6.62 | Yorkville | 94 | 61 | 77.5 | 7.29 |
| Charlesville | 96 | 48 | 70.4 | 4.19 | Tennessee. | ..... | ..... | ..... | ..... |
| Clarion | 94 | 52 | 72.9 | 6.21 | Andersonville | 89 | 57 | 75.4 | 6.34 |
| Coatesville | 94 | 52 | 12.93 | ..... | Arlington | 96 | 60 | 77.9 | 3.84 |
| Confluence | 94 | 52 | 4.22 | ..... | Carthage | 90 | 62 | 77.0 | 9.02 |
| Corry | 88 | 42 | 68.1 | 2.00 | Charleston | 90 | 60 | 77.8 | 2.71 |
| Drifton | 88 | 50 | 67.1 | 0.55 | Clarksville | 90 | 60 | 77.8 | 3.01 |
| Doylestown | ..... | ..... | 11.87 | Clinton | 90 | 60 | 77.8 | 7.28 | |
| Dyberry | 89 | 42 | 65.8 | 6.53 | Columbia | 96 | 62 | 75.4 | 11.73 |
| Eagle's Mere | 86 | 51 | 67.5 | 6.30 | Covington(1) | 89 | 68 | 78.0 | 5.43 |
| Edinburgh | 62 | 52 | 10.48 | Covington(2) | 97 | 58 | 79.5 | 4.78 | |
| Emporium | 87 | 50 | 71.2 | 0.00 | Cumberland Gap | 88 | 55 | 73.4 | 7.24 |
| Falls of Neshaminy | 93 | 41 | 70.0 | 7.03 | Dunlap | 94 | 64 | 77.1 | 6.47 |
| Franklin | 90 | 52 | 67.6 | 0.36 | Dyersburgh | 100 | 59 | 81.4 | 5.92 |
| Frankford Arsenal | 95 | 57 | 74.5 | 9.59 | Fayetteville | 95 | 67 | 77.2 | 6.84 |
| Frederick | ..... | ..... | 12.09 | Florence Station | 88 | 67 | 76.7 | 6.48 | |
| Freeport | ..... | ..... | 8.22 | Fostoria | 86 | 61 | 70.3 | 8.52 | |
| Germantown | 88 | 60 | 73.6 | 10.50 | Groton | 97 | 58 | 78.0 | 4.76 |
| Gettysburg | 95 | 45 | 68.8 | 1.04 | Grand Junction | 93 | 62 | 79.0 | 6.33 |
| Girardville | 90 | 53 | 72.6 | 9.46 | Grief | 94 | 65 | 77.8 | 3.87 |
| Grampian Hills | 94 | 52 | 70.8 | 7.33 | Greeneville | 86 | 65 | 73.2 | 5.45 |
| Greensburg | ..... | ..... | 4.37 | Hohenwald | 97 | 56 | 75.7 | 8.53 | |
| Hollidaysburgh | 95 | 47 | 71.6 | 6.22 | Jackesborough | 88 | 63 | 75.7 | 4.45 |
| Honesdale | 86 | 44 | 66.4 | 5.55 | Johnsonville | ..... | ..... | 3.55 | ..... |
| Lansdale | ..... | ..... | 15.02 | Kingston(1) | ..... | ..... | 3.16 | ..... |  |
| Le Roy | 93 | 50 | 70.0 | 8.33 | Kingston(2) | 93 | 65 | 79.8 | 2.96 |
| Lock No. 4 | ..... | ..... | 3.29 | Kingston Springs | 93 | 58 | 76.2 | 4.29 | |
| Mahoning | ..... | ..... | 3.00 | Leeville | 96 | 63 | 78.3 | 3.89 | |
| McConnellsburg | 92 | 48 | 72.0 | 8.23 | Lewistown | 91 | 65 | 76.6 | 8.50 |
| Meadville(1) | 89 | 52 | 2.82 | Lookout Mountain | 84 | 66 | 74.6 | 3.01 | |
| Meshoppen | 48 | 68.8 | 6.40 | Loudon | ..... | ..... | 3.20 | ..... |  |
| New Bloomfield | 94 | 40 | 72.7 | 6.08 | McKenzie | 92 | 66 | 79.9 | 5.86 |
| Nisbet | 59 | 71.0 | 5.10 | McMinnville | 92 | 59 | 73.9 | 5.23 | |
| Oil City | ..... | ..... | 4.30 | Milan(1) | 92 | 62 | 77.6 | 4.00 | |
| Ottaville | ..... | ..... | 13.19 | ..... | ..... | ..... | ..... | ..... |  |
| Parker's Landing | ..... | ..... | 5.24 | ..... | ..... | ..... | ..... | ..... |  |

Meteorological record of voluntary observers, &c.—Continued.

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. |
|---------------------|-------------------------------|-------|-------|-----------|---------------------|-------------------------------|-------|-------|-----------|
| | Max. | Min. | Mean. | | | Max. | Min. | Mean. | |
| Tennessee—Cont'd. | o | o | o | Ins. | Tennessee—Cont'd. | o | o | o | Ins. |
| Milan (2) | 96 | 60 | 80.0 | 4.32 | Milan (2) | 97 | 49 | 70.1 | 5.47 |
| Mont Eagle | 87 | 64 | 75.0 | 5.27 | Mont Eagle | 94 | 48 | 69.4 | 5.21 |
| Nunnelly | 93 | 58 | 75.1 | 7.98 | Nunnelly | 90 | 62 | 75.2 | 3.96 |
| Parksville | 91 | 62 | 75.2 | ..... | Parksville | 89 | 59 | 76.3 | 2.58 |
| Ridleton | 89 | 59 | 76.3 | 9.59 | Ridleton | 87 | 57 | 77.4 | 6.27 |
| Rockwood | 89 | 68 | 77.4 | 5.35 | Rockwood | 90 | 59 | 78.4 | 6.27 |
| Rogersville | 93 | 62 | 74.3 | 6.27 | Rogersville | 90 | 59 | 78.4 | 6.27 |
| Rugby | 89 | 62 | 74.3 | 6.27 | Rugby | 90 | 59 | 78.4 | 6.27 |
| Savannah | 92 | 62 | 78.2 | 5.30 | Savannah | 90 | 59 | 78.2 | 5.30 |
| Springdale | 94 | 60 | 77.6 | 6.77 | Springdale | 90 | 59 | 78.6 | 6.77 |
| Strawberry Plainst. | ..... | ..... | ..... | ..... | Strawberry Plainst. | ..... | ..... | ..... | ..... |
| Trenton | 88 | 59 | 76.3 | 2.69 | Trenton | 87 | 65 | 76.9 | 4.99 |
| Tullahoma | 87 | 59 | 76.9 | 1.66 | Tullahoma | 88 | 65 | 76.9 | 4.99 |
| Watkins | 97 | 68 | 78.8 | 1.66 | Watkins | 95 | 68 | 78.8 | 1.66 |
| Waynesborough | 85 | 61 | 75.3 | 8.82 | Waynesborough | 85 | 61 | 75.3 | 8.82 |
| Woodstock | 96 | 71 | 81.7 | 3.15 | Woodstock | 96 | 71 | 81.7 | 3.15 |
| Texas. | | | | | | | | | |

Reports received too late for publication in June.

| Stations. | Temperature. (Fahrenheit.) | | | Precip'n. | | Stations. | Temperature. (Fahrenheit.) | | | Precip'n. |
|-----------------------|-------------------------------|-------|-------|-----------|--|--------------------|-------------------------------|------|-------|-----------|
| | Max. | Min. | Mean | | | | Max. | Min. | Mean | |
| Arizona. | o | o | o | Ins. | | New York. | o | o | o | Ins. |
| Lochiel ..... | ..... | ..... | ..... | 1.55 | | Honeymead Brook. | 87 | 38 | 66.0 | 3.40 |
| Winslow | 101 | 54 | 80.8 | 0.85 | | Pennsylvania. | | | | |
| California. | | | | | | Blooming Grove.. | 91 | 48 | 68.0 | 6.70 |
| Boca | 95 | 36 | 63.9 | 0.00 | | Tennessee. | | | | |
| Pleasanton* | 88 | 58 | 68.5 | 0.00 | | Bolivar* | 93 | 61 | 77.7 | 9.40 |
| San Pedro | 87 | 61 | 70.6 | 0.00 | | Texas. | | | | |
| Shingle Springs | | | | 0.02 | | Baird | 88 | 60 | ..... | 8.76 |
| Missouri. | | | | | | West Indies. | | | | |
| Booneville | | | | 2.92 | | Grand Turk Is'd. | 84 | 83 | 83.8 | 4.19 |
| New Mexico. | | | | | | South America. | | | | |
| Albuquerque | 95 | 47 | 70.1 | 0.53 | | Colony of Surinam. | | | | |
| Nogal ..... | ..... | ..... | ..... | 2.72 | | Burnside-Coronie.. | 92 | 72 | 79.5 | 12.52 |

- Maximum and minimum from observed readings. § From one observation at 10 a.m.

Precipitation (inches and hundredths) observed at Fort Benton, Mont., by assistant surgeons, U. S. Army, and Signal Service observers.

| Years. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Annual. |
|--------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|---------|
| 1860 | | | | | | | | | | | | | |
| 1860 | 1.00 | 0.42 | 0.15 | 0.06 | 2.41 | 0.63 | 0.80 | 0.71 | 0.32 | 0.41 | 0.26 | 0.76 | ..... |
| 1861 | 0.50 | 0.38 | 0.48 | 1.49 | 1.58 | 0.11 | 0.93 | 0.10 | 0.46 | 0.71 | 0.14 | 0.22 | 7.21 |
| 1862 | 0.27 | 0.34 | 0.82 | 0.67 | 0.64 | 1.14 | 4.62 | 0.61 | 1.82 | 0.19 | 0.65 | 1.30 | 8.68 |
| 1863 | 0.60 | 0.65 | 0.23 | 1.14 | 3.03 | 1.67 | 1.29 | 1.59 | 0.58 | 0.19 | 0.61 | 0.59 | 12.34 |
| 1864 | 0.67 | 0.10 | 0.62 | 0.43 | 2.98 | 2.13 | 0.10 | 1.17 | 0.49 | 0.56 | 0.58 | 0.60 | 10.42 |
| 1865 | 0.66 | 1.11 | 0.22 | 1.04 | 1.60 | 2.57 | 2.24 | 1.19 | 0.13 | 0.71 | 0.85 | 1.12 | 12.75 |
| 1866 | 0.71 | 0.28 | 1.53 | 1.25 | 11.06 | 1.45 | 2.31 | 1.46 | 0.39 | 0.24 | 0.33 | 0.09 | 21.10 |
| 1867 | 0.72 | 0.11 | 0.60 | 1.04 | 4.58 | 1.44 | 1.94 | 0.82 | 0.90 | 0.43 | 0.45 | 0.00 | 13.01 |
| 1868 | 0.20 | 0.05 | 0.30 | 3.24 | 5.25 | 2.26 | 1.31 | 0.16 | 2.32 | 1.18 | 0.09 | 0.50 | 16.80 |
| 1869 | 0.22 | 0.74 | 0.14 | 1.16 | 4.08 | 4.98 | 1.98 | 1.56 | 0.18 | 0.60 | 0.06 | 1.40 | 17.30 |
| 1870 | 0.24 | 0.64 | 0.36 | 1.80 | 1.54 | 4.50 | 1.12 | 1.56 | 0.32 | 1.09 | 1.44 | 1.39 | 16.00 |
| 1871 | 2.27 | 0.66 | 0.29 | 0.18 | 1.43 | 3.46 | 2.28 | 1.18 | 1.32 | 1.94 | 1.73 | 0.07 | 16.81 |
| 1872 | 0.75 | 0.38 | 1.09 | 1.22 | 0.35 | 0.13 | 0.85 | 0.27 | 2.89 | 0.86 | 0.39 | 1.00 | 10.18 |
| 1873 | 0.75 | 0.45 | 1.34 | 1.02 | 3.31 | 1.93 | 0.16 | 1.01 | 0.93 | 1.64 | 0.36 | 0.11 | 13.01 |
| 1874 | 0.56 | 0.48* | 0.67* | 1.23* | 1.09 | 2.18 | 3.09 | 0.79 | 1.44 | 0.36 | 0.29 | 0.01 | 13.13 |
| 1875 | 0.94 | 0.60 | 0.40 | 0.64 | 0.48 | 5.60 | 2.82 | 1.81 | 0.25 | 0.37 | 0.65 | 0.38 | 14.94 |
| 1876 | 0.67 | 0.65 | 0.70 | 2.01 | 0.36 | 1.53 | 0.90 | 0.66 | 1.24 | ..... | ..... | ..... | ..... |
| Mean.. | 0.69 | 0.47 | 0.58 | 1.16 | 2.69 | 2.22 | 1.69 | 0.98 | 0.94 | 0.72 | 0.57 | 0.59 | 13.30 |

* Interpolated, and not considered in the averages.

*Precipitation (inches and hundredths) observed at Camp Date Creek, Ariz.,
by assistant surgeons, U. S. Army.*

* 12 days.

*Precipitation (inches and hundredths) observed at Pantano, Ariz., by
Southern Pacific Railroad Company.*

| | | | | | | | | | | | | | | |
|--------|-------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|-------|
| 880 | ..... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 881 | ..... | 0.08 | 0.00 | 1.22 | 0.73 | 0.60 | 0.00 | 4.52 | 2.72 | 3.30 | 0.00 | 0.00 | 0.70 | ..... |
| 882 | ..... | 2.12 | 2.80 | 0.65 | 0.00 | 0.60 | 0.90 | 1.77 | 5.74 | 0.00 | 0.00 | 1.15 | 0.00 | 15.65 |
| 883 | ..... | 1.84 | 0.41 | 1.61 | 0.00 | ..... | 0.45 | 1.77 | 2.00 | 0.06 | 0.53 | 0.05 | 0.19 | 15.73 |
| 884 | ..... | 0.31 | 1.04 | 0.73 | 0.00 | 0.34 | ..... | 0.40 | 2.60 | 1.45 | 2.80 | 0.85 | 4.70 | ..... |
| 885 | ..... | 0.00 | 1.10 | 0.98 | 0.05 | 0.20 | 0.99 | 1.57 | 1.63 | 2.08 | 0.00 | 0.00 | 0.56 | 8.66 |
| 886 | ..... | 1.40 | 1.07 | 0.85 | 0.30 | 0.00 | 0.00 | 1.00 | 2.54 | 2.24 | 0.46 | 0.50 | 0.00 | 10.36 |
| 887 | ..... | 0.00 | 1.15 | 0.00 | 0.00 | ..... | 0.31 | 1.86 | 2.66 | 1.38 | 0.38 | 0.50 | 1.19 | ..... |
| 888 | ..... | 0.00 | ..... | 1.42 | 0.02 | 0.25 | ..... | ..... | ..... | ..... | 1.83 | 0.50 | ..... | ..... |
| Mean.. | 0.72 | 1.08 | 0.91 | 0.14 | 0.33 | 0.44 | 1.84 | 2.85 | 1.50 | 0.83 | 0.54 | 0.87 | 12.68 | |

Precipitation (inches and hundredths) observed at Fort Defiance, Ariz., by assistant surgeons, U. S. Army.

| | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|------|-------|------|-------|------|------|-------|------|-------|
| 852 | ..... | ..... | ..... | ..... | 0.89 | 2.35 | 0.90 | 1.30 | 1.82 | 1.60 | 1.22 | 1.30 | ..... |
| 853 | 0.40 | 0.08 | 1.29 | 0.10 | 1.44 | 0.43 | 1.43 | 4.65 | 2.64 | 0.94 | 0.22 | 0.25 | I3.87 |
| 854 | 2.20 | 0.15 | 0.45 | 0.93 | 1.51 | 1.24 | 3.94 | 5.24 | 3.47 | 0.62 | 1.49 | 1.20 | 22.44 |
| 855 | 0.83 | 1.71 | 3.30 | 0.51 | 0.10 | 0.43 | 1.54 | ..... | 2.86 | 0.00 | 1.47 | 1.59 | ..... |
| 856 | 0.82 | 1.54 | 0.54 | 0.78 | 0.33 | 0.10 | 2.14 | 3.07 | 1.75 | 0.00 | 0.18 | 0.40 | II.63 |
| 857 | 0.20 | 0.07 | 0.00 | 0.51 | 0.04 | 0.45 | 1.30 | 1.78 | 1.01 | 1.73 | 4.30 | 1.07 | I3.06 |
| 858 | 0.54 | 0.54 | 0.59 | 1.64 | 0.00 | 0.27 | 2.22 | 3.32 | 0.95 | 0.28 | 0.28 | 1.34 | II.97 |
| 859 | 0.02 | 0.77 | 0.41 | 0.85 | 0.39 | 0.63 | 2.72 | 2.17 | 1.79 | 0.30 | ..... | 0.23 | ..... |
| 860 | 2.86 | 0.12 | 0.13 | 0.02 | 0.00 | ..... | 5.77 | 0.30 | 0.49 | 0.80 | 0.15 | 0.46 | ..... |
| Iean.. | 0.98 | 0.70 | 0.84 | 0.67 | 0.52 | 0.74 | 2.44 | 2.73 | 1.86 | 0.70 | 1.16 | 0.87 | I4.59 |

Normal daily temperature values for certain months for a period of seventeen years at New Ulm, Tex., and the departures therefrom for the same months of the year 1889, by C. Runge, voluntary observer.

| Date. | January. | | | | | | February. | | | | | |
|------------|----------|------------|------------------------|---------------|---------------|---------|------------|------------------------|---------------|---------------|---------|------------|
| | Normal. | Mean 1889. | Departure from normal. | Mean maximum. | Mean minimum. | Normal. | Mean 1889. | Departure from normal. | Mean maximum. | Mean minimum. | Normal. | Mean 1889. |
| 1..... | 46 | 40 | - 6 | 67 | 28 | 53 | 58 | - 3 | 71 | 39 | 71 | 38 |
| 2..... | 49 | 46 | - 3 | 68 | 31 | 53 | 49 | + 4 | 70 | 32 | 70 | 32 |
| 3..... | 48 | 45 | + 3 | 69 | 28 | 51 | 49 | + 4 | 70 | 19 | 69 | 23 |
| 4..... | 47 | 47 | + 0 | 71 | 20 | 51 | 47 | + 4 | 70 | 38 | 66 | 32 |
| 5..... | 45 | 49 | + 4 | 72 | 28 | 53 | 49 | + 6 | 70 | 43 | 70 | 48 |
| 6..... | 49 | 54 | + 5 | 72 | 29 | 55 | 53 | + 5 | 70 | 28 | 74 | 28 |
| 7..... | 50 | 58 | + 8 | 71 | 17 | 57 | 63 | + 5 | 71 | 28 | 71 | 34 |
| 8..... | 42 | 51 | + 9 | 68 | 19 | 57 | 52 | + 6 | 72 | 29 | 72 | 39 |
| 9..... | 42 | 43 | + 1 | 72 | 26 | 58 | 50 | + 6 | 72 | 41 | 69 | 29 |
| 10..... | 46 | 53 | + 7 | 72 | 24 | 56 | 55 | + 6 | 72 | 38 | 73 | 41 |
| 11..... | 50 | 54 | + 4 | 72 | 25 | 56 | 52 | + 4 | 71 | 34 | 72 | 34 |
| 12..... | 52 | 60 | + 8 | 64 | 30 | 55 | 58 | + 3 | 72 | 29 | 72 | 29 |
| 13..... | 51 | 60 | + 9 | 65 | 28 | 57 | 57 | + 10 | 72 | 29 | 73 | 39 |
| 14..... | 50 | 60 | + 10 | 66 | 12 | 54 | 66 | + 15 | 73 | 41 | 72 | 41 |
| 15..... | 51 | 68 | + 17 | 69 | 18 | 57 | 72 | + 15 | 72 | 42 | 69 | 29 |
| 16..... | 48 | 58 | + 10 | 69 | 28 | 58 | 64 | + 6 | 72 | 38 | 73 | 41 |
| 17..... | 46 | 57 | + 11 | 68 | 33 | 56 | 42 | - 14 | 72 | 38 | 73 | 44 |
| 18..... | 48 | 49 | + 1 | 68 | 27 | 58 | 45 | - 13 | 73 | 44 | 74 | 44 |
| 19..... | 49 | 56 | + 7 | 70 | 16 | 56 | 44 | - 12 | 74 | 44 | 64 | 40 |
| 20..... | 52 | 43 | - 10 | 71 | 23 | 55 | 50 | - 5 | 67 | 40 | 73 | 41 |
| 21..... | 53 | 43 | - 10 | 72 | 32 | 57 | 54 | - 3 | 72 | 42 | 70 | 45 |
| 22..... | 54 | 48 | - 4 | 73 | 31 | 59 | 50 | - 8 | 72 | 42 | 70 | 47 |
| 23..... | 49 | 56 | + 7 | 72 | 22 | 59 | 51 | + 3 | 70 | 45 | 74 | 46 |
| 24..... | 48 | 50 | + 2 | 60 | 30 | 59 | 62 | + 5 | 70 | 47 | 71 | 42 |
| 25..... | 54 | 49 | - 5 | 66 | 37 | 58 | 63 | + 5 | 70 | 47 | 71 | 42 |
| 26..... | 57 | 43 | - 14 | 71 | 42 | 58 | 63 | + 5 | 74 | 46 | 71 | 42 |
| 27..... | 58 | 41 | - 17 | 71 | 17 | 60 | 64 | + 4 | 71 | 42 | 71 | 42 |
| 28..... | 55 | 44 | - 11 | 72 | 20 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 29..... | 54 | 55 | + 1 | 71 | 20 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 30..... | 56 | 58 | + 2 | 70 | 33 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 31..... | 57 | 52 | + 5 | 72 | 42 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Mean | 60 | 51 | + 1 | 70 | 27 | 56 | 55 | - 1 | 71 | 37 | 71 | 37 |
| March. | | | | | | | | | | | | |
| April. | | | | | | April. | | | | | | |
| 1..... | 61 | 54 | - 7 | 70 | 48 | 64 | 64 | 0 | 70 | 48 | 70 | 56 |
| 2..... | 59 | 46 | - 13 | 71 | 46 | 65 | 69 | + 4 | 74 | 56 | 77 | 58 |
| 3..... | 60 | 55 | - 6 | 73 | 45 | 67 | 61 | + 6 | 77 | 58 | 78 | 47 |
| 4..... | 62 | 56 | - 6 | 75 | 46 | 66 | 65 | + 5 | 77 | 54 | 78 | 48 |
| 5..... | 63 | 52 | - 11 | 75 | 45 | 67 | 72 | + 5 | 77 | 54 | 78 | 54 |
| 6..... | 60 | 51 | - 9 | 75 | 42 | 70 | 60 | + 1 | 77 | 54 | 78 | 54 |
| 7..... | 59 | 60 | + 1 | 71 | 41 | 69 | 68 | - 1 | 77 | 54 | 78 | 45 |
| 8..... | 60 | 63 | + 3 | 70 | 42 | 65 | 69 | + 4 | 79 | 49 | 78 | 49 |
| 9..... | 61 | 61 | 0 | 72 | 47 | 67 | 69 | + 2 | 79 | 49 | 78 | 57 |
| 10..... | 62 | 49 | - 13 | 73 | 48 | 69 | 69 | + 1 | 78 | 57 | 78 | 61 |
| 11..... | 62 | 52 | - 10 | 74 | 42 | 70 | 70 | + 1 | 76 | 53 | 78 | 53 |
| 12..... | 61 | 52 | - 9 | 73 | 46 | 67 | 72 | + 5 | 76 | 53 | 78 | 51 |
| 13..... | 63 | 60 | - 1 | 73 | 46 | 66 | 66 | 0 | 78 | 51 | 78 | 51 |
| 14..... | 64 | 61 | - 3 | 74 | 31 | 68 | 67 | - 1 | 78 | 56 | 80 | 55 |
| 15..... | 64 | 71 | + 7 | 76 | 34 | 69 | 72 | + 3 | 80 | 55 | 80 | 60 |
| 16..... | 64 | 72 | + 8 | 75 | 40 | 69 | 73 | + 4 | 78 | 56 | 77 | 51 |
| 17..... | 61 | 68 | - 7 | 76 | 41 | 70 | 71 | + 1 | 78 | 56 | 77 | 51 |
| 18..... | 62 | 66 | + 4 | 74 | 46 | 70 | 72 | + 2 | 76 | 56 | 77 | 56 |
| 19..... | 64 | 63 | - 1 | 76 | 49 | 70 | 71 | + 1 | 77 | 62 | 77 | 47 |
| 20..... | 60 | 66 | + 6 | 75 | 38 | 70 | 71 | - 3 | 77 | 48 | 77 | 53 |
| 21..... | 61 | 66 | + 5 | 74 | 46 | 71 | 68 | - 3 | 77 | 53 | 77 | 51 |
| 22..... | 61 | 66 | - 1 | 73 | 44 | 69 | 71 | + 2 | 75 | 51 | 77 | 51 |
| 23..... | 62 | 52 | - 10 | 70 | 49 | 68 | 71 | + 5 | 77 | 50 | 77 | 56 |
| 24..... | 63 | 54 | - 9 | 72 | 45 | 67 | 74 | + 7 | 77 | 50 | 77 | 56 |
| 25..... | 64 | 58 | - 6 | 72 | 44 | 69 | 75 | + 6 | 77 | 56 | 77 | 56 |
| 26..... | 65 | 64 | - 1 | 76 | 43 | 71 | 76 | + 5 | 79 | 59 | 77 | 64 |
| 27..... | 65 | 54 | - 11 | 76 | 48 | 72 | 73 | 0 | 77 | 64 | 77 | 60 |
| 28..... | 65 | 63 | - 2 | 76 | 47 | 72 | 73 | + 1 | 78 | 59 | 78 | 57 |
| 29..... | 65 | 67 | + 0 | 79 | 46 | 71 | 74 | + 3 | 78 | 59 | 78 | 57 |
| 30..... | 68 | 68 | - 0 | 80 | 46 | 69 | 75 | - 12 | 78 | 57 | 78 | 57 |
| 31..... | 67 | 70 | - 3 | 74 | 57 | 68 | 70 | - 1 | 77 | 57 | 77 | 57 |
| Mean | 65 | 60 | - 3 | 74 | 44 | 68 | 70 | - 1 | 77 | 57 | 77 | 57 |

| May. | June. |
|------|-------|
|------|-------|